

### AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method ~~for therapeutic management of infertility and increasing the quality of fertilized oocytes and embryos by~~ of programming an infertility treatment cycle comprising controlled ovarian stimulation (COS) and assisted reproductive techniques (ART) ~~in order to optimize oocyte harvesting and fertilization~~, the method comprising the following steps:

a) ~~programming the start of a treatment~~ programmed menstrual cycle comprising COS by inducing ~~the start of menses~~ luteal regression in an infertile patient by administering an LHRH antagonist during the luteal phase of the preceding menstrual cycle,

wherein the LHRH antagonist is selected from the group consisting of cetrorelix, teverelix, ganirelix, antide, and abarelix, and further wherein the LHRH antagonist is administered at a dosage range between 0.5 mg to 10 mg; ~~during the luteal phase of the menstrual cycle preceding the treatment cycle~~;

b) terminating administration of the LHRH antagonist prior to the onset of menses;

b)c) programming controlled ovarian stimulation by stimulating ovarian follicle growth by administering a compound selected from the group consisting of urinary FSH, recombinant FSH, HMG, recombinant LH, clomiphene, and or a combination thereof, during the follicular phase of the programmed menstrual cycle;

e)d) suppressing premature ovulation by administering a LHRH antagonist selected from the group consisting of cetrorelix, teverelix, ganirelix, antide, and abarelix during the follicular stage phase of the treatment programmed menstrual cycle;

d)e) inducing ovulation by administering HCG; and

e)f) applying assisted reproduction techniques.

2-3. (Cancelled)

4. (Currently amended) The method of claim 1, wherein the programmed menstrual cycle of step (a) is programmed on a day that permits the assisted reproduction techniques of step (f) to be carried out during routine operations of laboratories, clinics,

~~hospitals or other assisted reproduction facilities. administration of the LHRH antagonist completed on Mondays to Thursdays to obtain start of menstrual bleeding and of ovarian stimulation therapy on Fridays to Mondays and scheduling and undertaking of oocyte pick up and further ART procedures on Mondays to Thursdays.~~

5. (Currently amended) The method of ~~therapeutic management of infertility by programming of controlled ovarian stimulation and assisted reproductive technique procedures according to claim 1, in which~~ wherein the LHRH antagonist ~~that is administered in~~ of step (c) is cetorelix.

6. (Currently amended) The method of ~~therapeutic management of infertility by programming of controlled ovarian stimulation and assisted reproductive technique procedures according to claim 1, in which~~ wherein the LHRH antagonist ~~that is administered in~~ of step (c) is teverelix.

7. (Currently amended) The method of ~~therapeutic management of infertility by programming of controlled ovarian stimulation and assisted reproductive technique procedures according to claim 1, in which~~ wherein the LHRH antagonist ~~that is administered in~~ of step (c) is ganirelix.

8. (Currently amended) The method of ~~therapeutic management of infertility by programming of controlled ovarian stimulation and assisted reproductive technique procedures according to claim 1, in which~~ wherein the LHRH antagonist ~~that is administered in~~ of step (c) is antide.

9. (Currently amended) The method of ~~therapeutic management of infertility by programming of controlled ovarian stimulation and assisted reproductive technique procedures according to claim 1, in which~~ wherein the LHRH antagonist ~~that is administered in~~ of step (c) is abarelix.

10-15. (Cancelled)

16. (Currently amended) The method ~~of therapeutic management of infertility by programming of controlled ovarian stimulation and assisted reproductive technique procedures according to claim 1, in which step (a) comprises administering~~ wherein the LHRH antagonist of step (a) is cetrorelix, with a dosage of 0.5 to 10 mg.

17. (Currently amended) The method ~~of therapeutic management of infertility by programming of controlled ovarian stimulation and assisted reproductive technique procedures according to claim 1, in which step (a) comprises administering~~ wherein the LHRH antagonist of step (a) is teverelix, with a dosage of 0.5 to 10 mg.

18. (Currently amended) The method ~~of therapeutic management of infertility by programming of controlled ovarian stimulation and assisted reproductive technique procedures according to claim 1, in which step (a) comprises administering~~ wherein the LHRH antagonist of step (a) is ganirelix, with a dosage of 0.5 to 10 mg.

19. (Currently amended) The method ~~of therapeutic management of infertility by programming of controlled ovarian stimulation and assisted reproductive technique procedures according to claim 1, in which step (a) comprises administering~~ wherein the LHRH antagonist of step (a) is antide, with a dosage of 0.5 to 10 mg.

20. (Currently amended) The method ~~of therapeutic management of infertility by programming of controlled ovarian stimulation and assisted reproductive technique procedures according to claim 1, in which step (a) comprises administering~~ wherein the LHRH antagonist of step (a) is abarelix, with a dosage of 0.5 to 10 mg.

21. (Currently amended) The method ~~of therapeutic management of infertility by programming of controlled ovarian stimulation and assisted reproductive technique procedures according to claim 1, in which the stimulation is performed by administration of~~ wherein the

compound of step (c) is selected from the group consisting of urinary FSH, or recombinant FSH, or HMG, or recombinant LH, or a combination thereof.

22. (Currently amended) The method of ~~therapeutic management of infertility by programming of controlled ovarian stimulation and assisted reproductive technique procedures according to claim 1, in which the ovarian stimulation is achieved with~~ wherein the compound of step (c) is clomiphene.

23. (Currently amended) The method of ~~therapeutic management of infertility by programming of controlled ovarian stimulation and assisted reproductive technique procedures according to claim 1, in which the~~ wherein ovarian stimulation is achieved with ~~the~~ a combination of antioestrogens ~~with~~ and gonadotropins.

24. (Currently amended) The method of ~~therapeutic management of infertility by programming of controlled ovarian stimulation and assisted reproductive technique procedures according to claim 1, in which the~~ wherein ovarian stimulation is achieved with ~~the~~ a combination of clomiphene ~~with~~ and gonadotropins.

25. (Currently amended) The method of ~~therapeutic management of infertility by programming of controlled ovarian stimulation and assisted reproductive technique procedures according to claim 1, wherein step (e)~~ (f) comprises applying IVF, ICSI, GIFT, ZIFT or intrauterine insemination via sperm injection.